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ABSTRACT

This study examined the impact of teachers' attractiveness and gender upon students' perception of the teachers' ability. A group of seventh grade math students (N=28) was chosen for the experiment. The students rated photographs of teachers in the areas of organization, classroom management, motivation, communication, sensitivity, imagination, and competence. The results of this analysis revealed a significant main effect on student perceptions due to the attractiveness of the teacher in the areas of organization, classroom management, motivation and sensitivity. Also, there was a significant main effect on students' perception due to the gender of the teacher. The students rated the female photographs higher than male photographs in the area of organization. Finally, there was a significant interaction between the attractiveness of the teacher and the gender of the teacher in the areas of organization, sensitivity, and imagination. Overall, females rated higher than males and teachers considered attractive were given higher ratings than teachers considered average and unattractive. (IAH)

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# THE IMPACT OF TEACHERS' ATTRACTIVENESS AND GENDER ON STUDENTS' PERCEPTION OF THE TEACHERS' ABILITY

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## ABSTRACT

The focus of this study was to examine the impact the teachers' attractiveness and gender has upon students' perception of the teachers' ability. A group of seventh grade math students was chosen for the experiment. The students rated photographs of teachers in the areas of organization, classroom management, motivation, communication, sensitivity, imagination, and competence. The results of this analysis revealed a significant main effect on student perceptions due to the attractiveness of the teacher in the areas of organization, classroom management, motivation and sensitivity. Also, there was a significant main effect on students' perception due to the gender of the teacher. The students rated the female photographs higher than male photographs in the area of organization. Finally, there was a significant interaction between the attractiveness of the teacher and the gender of the teacher in the areas of organization, sensitivity and imagination.

Overall, the female rated higher than the male and the attractive teachers were given higher ratings than the average and unattractive teachers.

## INTRODUCTION

How do students perceive their teachers? Is there validity in the saying "what is beautiful is good"? Goebel and Cashen (1979) stated that speculation exists among academics as to the effect personal characteristics such as teacher gender and attractiveness have on student ratings.

Since incorporating student ratings of teachers into the total teacher evaluation process is becoming more prominent in schools, it has become an increasing concern among faculty members and administrators as to the validity, interpretation, and use of these student ratings of teachers. Researchers have found that students do not always receive quality education from those teachers that they rate the highest. It has also been demonstrated that teachers are usually appraised on personal characteristics rather than actual teaching ability.

The purpose of this study is to determine if students' ratings of teacher performance are biased on the basis of teacher appearance and sex and if these biases are identifiable in student reactions to pictures of male and female teachers with no information as to teacher characteristics and/or performance. Anderson, (1965) stated that the first

impression that a teacher makes on students influences their future observations, in a biased direction.

## SURVEY OF RELATED LITERATURE

There have been numerous studies conducted involving physical attractiveness, gender, and the impact they have on student perception of teachers' professional ability. Research indicates the image that a teacher presents in the classroom is a critical factor in determining how effectively he or she is perceived to be able to teach. Buck and Tiene (1979) explored the impact of teachers' physical appearance, gender, and teaching philosophy on other person's perceptions of their competence. No significant main effects for teacher attractiveness or gender upon perceptions of competence were found. There was only one main effect for gender. Female teachers were rated significantly higher on the measure of overall effectiveness. Attractiveness by itself was not found to have an effect on any of the ratings of teacher effectiveness. These results are consistent with those of previous studies (Gross & Crafton, 1977; Jackson, 1983) that found a weakening of the "primacy effect" of physical attractiveness when aspects of the personality were revealed.

Goebel and Cashen (1979) conducted a related study to determine whether student ratings of teachers vary consistently across developmental levels with age, sex, and attractiveness of the teacher. The results contradicts results of studies mentioned previously in this review, because it was found that, across all developmental levels and all factors, age, sex, and attractiveness of teachers significantly affected student ratings. The findings varied with the particular factor being rated and the developmental level of the students doing the rating.

In the study by Goebel and Cashen, attractiveness was the dominant influence on ratings, showing a significant effect on the global rating at each developmental level. Main effects showed that attractive teachers were viewed as being less likely to give students too much work to do, more likely to be friendly, to encourage students to interact, to be better organized, and overall to be better teachers.

In a related study, Walster, Dion, and Berscheid (1972) wanted to determine if a physical attractiveness stereotype exists, and, if so, to investigate the content of the stereotype along several dimensions. The results suggest that a physical attractiveness stereotype exists. Not only are physically attractive

people assumed to possess more socially desirable personalities, it is also assumed that their lives will be happier and more successful.

Hill and Lando (1976) investigated the effects of both physical attractiveness and sex (as indicated in a photograph) upon attributions of performance in a single paradigm. They hypothesized that the "beauty-is-good" stereotype would hold for trait evaluations. Their findings indicated that physically attractive photographs were assigned higher ratings than physically unattractive photographs. There was an interaction between physical attractiveness and sex with the unattractive female receiving significantly lower ratings than the unattractive male. The attractive female photograph received significantly higher ratings of happiness and intelligence than did the photograph of the unattractive female, whereas no such difference occurred in the case of the male photographs.

Clifford and Walster (1973) hypothesized that a child's attractiveness strongly influences his teachers judgements; the more attractive the child, the more biased in his favor they expected teachers to be. Results from their study showed that the child's attractiveness was significantly associated with the

teacher's expectations about how intelligent the child was, how interested in education his parents were, how far he was likely to progress in school, and how popular he would be with his peers.

## PLANNING AND CONDUCTING THE STUDY

The subjects in this study were 28 seventh grade students, 14 male and 14 female, who attended a middle school located in Columbia County. Approximately 90% of the students were Caucasian and most of them were from an upper middle socioeconomic background.

Hypotheses:

For each dependent variable the following null hypotheses were tested:

Hypothesis 1: There is no significant main effect on student perceptions due to the attractiveness of the teacher.

Hypothesis 2: There is no significant main effect on student perceptions due to the gender of the teacher.

Hypothesis 3: There is no significant interaction between the attractiveness of the teacher and the gender of the teacher.

Variables:

Independent Variable 1: Attractiveness of the teacher

Levels: Attractive, Average, Unattractive

Independent Variable 2: Gender

Levels: Male, Female

Dependent Variable: The students rated questions on a scale of one to five. Each of the eight questions that the students rated concerning the pictures were used as a dependent variable. The eight questions are listed below:

1. This teacher is probably well organized.
2. This teacher manages the classroom well.
3. This teacher motivates students effectively.
4. This teacher has good rapport with the class.
5. This teacher conveys material effectively.
6. This teacher is sensitive to individual needs.
7. This teacher is imaginative about assignments.
8. This teacher appears to be competent.

## DATA COLLECTION

A survey was conducted to obtain attractive, unattractive and average representatives of both sexes. Twenty-six photographs (13 male and 13 female) were shown to 10 seventh grade students, none of whom participated in the experiment. They rated the attractiveness of each face on a scale from one to five. The two most extreme mean scores in either direction for male and female were selected as the faces used in the experiment.

The subjects selected for the experiment were shown six black and white photographs of adults, both female and male. Color was eliminated in the photographs to avoid individual differences in perception, vision, and preference. The photographs represented attractive and unattractive females, average females and average males and attractive and unattractive males. Subjects were shown photographs of the male and female teachers in random order. Each subject received an eight item evaluative questionnaire that assessed different aspects of teaching effectiveness. Using the Likert scale with values from (one = strongly disagree, five = strongly agree) the subjects were asked to evaluate the teacher whose picture they had in front of them on each of the

eight items. They circled the value that best represented their reaction to the teacher whose photograph they were shown.

## STATISTICAL ANALYSIS

A repeated-measures designed was used in this study. In order to test the null hypotheses at the .05 significance level, a 2 x 3 (within-within) ANOVA was used for each dependent variable.

Each time the null hypothesis concerning the main effect due to the teacher's attractiveness was rejected, a Tukey's (a) test was used to determine specific differences. Of course, when the main effect due to sex was found to be significant, there was no need to form specific comparisons because, in this case, the group with the higher mean was significantly higher than the group of the lower mean. When interaction between attractiveness and sex was significant, specific comparisons were performed using Tukey's (a) test.

## RESULTS

A 2 (male versus female) x 3 (attractive versus average versus unattractive) within-within design

analysis of variance was used to analyze the scores rated on each question.

Question 1 This teacher is well organized.

Group means and standard deviations for Question 1 are shown in Table 1. The results of the analysis of variance are in Table 2. The main effect due to attractiveness was significant. Tukey's (a) tests showed that the attractive pictures were given significantly higher ratings than the unattractive pictures.

The main effect due to sex of the pictures was also significant, with female pictures obtaining higher ratings than male pictures.

Furthermore, the interaction between attractiveness and sex was significant. Tukey's (a) tests for simple effects showed that the average male received significantly higher ratings than both the attractive male and the unattractive male; however, the attractive female got significantly higher ratings that both the average female and the unattractive female. In addition, the attractive female was rated significantly higher than the attractive male, and the unattractive female was rated significantly higher than the unattractive male.

But the average male received significantly higher ratings than the average female.

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Insert Tables 1 and 2 about here

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Question 2 This teacher manages the classroom well.

Group means and standard deviations for Question 2 are shown in Table 3. The results of the analysis of variance are in Table 4. The main effect due to attractiveness was significant. Tukey's (a) tests revealed that the attractive pictures were rated significantly higher than the unattractive pictures.

The main effect due to sex did not reveal any significance. There was no significant interaction.

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Insert Tables 3 and 4 about here

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Question 3 This teacher motivates students effectively.

Group means and standard deviations are shown in Table 5. The results of the analysis of variance are given in Table 6. The main effect due to attractiveness was significant. Tukey's (a) tests demonstrated that the attractive pictures were given significantly higher ratings than the unattractive

pictures. No significant difference due to sex was found, nor was a significant interaction found.

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Insert Tables 5 and 6 about here

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Question 4 This teacher has good rapport with the class.

Group means and standard deviations are shown in Table 7. The results of the analysis of variance are given in Table 8. The main effect due to attractiveness was significant. Tukey's (a) tests revealed that both the attractive and the average pictures received significantly higher ratings than the unattractive pictures. No significant difference was shown based on sex. Also, there was no interaction.

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Insert Tables 7 and 8 about here

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Question 5 This teacher conveys material effectively.

Group means and standard deviations are given in Table 9. The results of the analysis of variance are disclosed in Table 10. There was no significant difference due to attractiveness of the pictures or due to the sex of the pictures. Also, there was no interaction.

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Insert Tables 9 and 10 about here

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Question 6 This teacher is sensitive to individual needs.

Group means and standard deviations are given in Table 11. The results of the analysis of variance are disclosed in Table 12.

The main effect due to attractiveness was significant. Tukey's (a) tests showed no significant difference between the three levels (at the .05 degree of significance). However, the attractive pictures were very close to being significantly higher than both the average pictures and the unattractive pictures. The main effect due to sex did not show any significance.

The interaction between attractiveness and sex was significant. Tukey's (a) tests for simple effects showed that the attractive male ratings were significantly higher than the average male ratings. The attractive female received significantly higher ratings than the unattractive female and the average female received significantly higher ratings than the unattractive female. However, there was no significant difference between the attractive male and the

attractive female. But, the average females received significantly higher ratings than the average males. Finally, there was no significant difference between the unattractive male and the unattractive female.

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Insert Tables 11 and 12 about here

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Question 7 This teacher is imaginative about assignments.

Group means and standard deviations are given in Table 13. The results of the analysis of variance are given in Table 14.

There was no significant difference due to attractiveness of the pictures. Also, there was no significant difference due to the sex of the pictures. However, there was an interaction between attractiveness and sex. Tukey's (a) tests for simple effects showed that the attractive male pictures were rated significantly higher than the average male picture. Also, the average female picture scored significantly higher than the unattractive female picture. However, the ratings between the attractive male and the attractive female revealed no significant difference. Although the average female picture rated significantly higher than the average male. Finally,

there were no significant differences between the unattractive male and the unattractive female.

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Insert Tables 13 and 14 about here

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Question 8 This teacher appears to be competent.

Group means and standard deviations are disclosed in Table 15. The results of the analysis of variance are disclosed in Table 16. There were no significant differences due to attractiveness or sex. Also, there was no significant interaction between attractiveness and sex.

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Insert Tables 15 and 16 about here

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## DISCUSSION

In this study, 28 students rated photographs of teachers to show the impact that the teachers' attractiveness and sex have upon the students' perception of their ability. However, there may be factors in this study that could limit the reliability. The gender of the students may have affected the internal validity. The students have had mostly female teachers in the past. The male teachers may have had

an impact on the students' perception as a disciplinarian. Another limitation that may affect the internal validity is the race of the students. Eight-six percent of the students were of Caucasian ancestry, but it is possible that race has an effect on student perceptions. All six photographs of the teachers rated by the students were Caucasian. Different results may occur if photographs involve other races.

Regardless of the possible limitations posed for this study, it appears that teacher attractiveness and teacher gender significantly affect student perceptions. Further research on this topic would be beneficial.

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Table 1. Group means and standard deviations for Question 1.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>2.82<br>1.31<br>46.11 | 28<br>4.61<br>.79<br>16.68 | 3.71 |
| AVE | 28<br>3.79<br>1.32<br>46.71 | 28<br>3.04<br>1.07<br>30.96 | 3.41 |
| UNA | 28<br>2.61<br>1.55<br>64.68 | 28<br>3.57<br>1.32<br>46.86 | 3.09 |
| | 3.07 | 3.74 | |

Table 2. Results of the analysis of variance for Question 1.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 73.810 | 27 | | | |
| ATTRAC | 10.940 | 2 | 5.470 | 3.615 | .032 |
| ERROR | 81.726 | 54 | 1.513 | | |
| SEX | 18.667 | 1 | 18.667 | 10.955 | .002 |
| ERROR | 46.00 | 27 | 1.704 | | |
| ATTRAC SEX | 46.869 | 2 | 23.435 | 25.064 | <.001 |
| ERROR | 50.464 | 54 | .935 | | |
| TOTAL | 328.476 | 167 | | | |
| (RESIDUAL) | 178.190 | 135 | | | |

Table 3. Group means and standard deviations for Question 2.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>3.96<br>.92<br>22.96 | 28<br>3.93<br>.77<br>15.86 | 3.95 |
| AVE | 28<br>3.79<br>1.17<br>36.71 | 28<br>3.25<br>1.38<br>51.25 | 3.52 |
| UNA | 28<br>3.29<br>1.00<br>27.71 | 28<br>3.11<br>1.26<br>42.68 | 3.20 |
| | 3.68 | 3.43 | |

Table 4. Results of the analysis of variance for Question 2.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 56.351 | 27 | | | |
| ATTRAC | 15.857 | 2 | 7.929 | 8.600 | <.001 |
| ERROR | 49.810 | 54 | .922 | | |
| SEX | 2.625 | 1 | 2.625 | 3.052 | .088 |
| ERROR | 23.208 | 27 | .860 | | |
| ATTRAC SEX | 1.857 | 2 | .929 | .740 | |
| ERROR | 67.810 | 54 | 1.256 | | |
| TOTAL | 217.518 | 167 | | | |
| (RESIDUAL) | 140.827 | 135 | | | |

Table 5. Group means and standard deviations for Question 3.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>4.00<br>1.09<br>32.00 | 28<br>3.46<br>1.23<br>40.96 | 3.73 |
| AVE | 28<br>3.50<br>1.14<br>35.00 | 28<br>3.32<br>1.19<br>38.11 | 3.41 |
| UNA | 28<br>3.11<br>1.03<br>28.68 | 28<br>2.79<br>1.10<br>32.71 | 2.95 |
| | 3.54 | 3.19 | |

Table 6. Results of the analysis of variance for Question 3.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 28.685 | 27 | | | |
| ATTRAC | 17.476 | 2 | 8.738 | 7.127 | .002 |
| ERROR | 66.190 | 54 | 1.226 | | |
| SEX | 5.006 | 1 | 5.006 | 3.845 | .057 |
| ERROR | 35.161 | 27 | 1.302 | | |
| ATTRAC SEX | .905 | 2 | .452 | .315 | |
| ERROR | 77.429 | 54 | 1.434 | | |
| TOTAL | 230.851 | 167 | | | |
| (RESIDUAL) | 178.780 | 135 | | | |

Table 7. Group means and standard deviations for Question 4.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>3.71<br>.94<br>23.71 | 28<br>3.89<br>1.07<br>30.68 | 3.80 |
| AVE | 28<br>3.21<br>.88<br>20.71 | 28<br>3.50<br>1.17<br>37.00 | 3.36 |
| UNA | 28<br>2.86<br>1.00<br>27.43 | 28<br>2.75<br>1.11<br>33.25 | 2.80 |
| | 3.26 | 3.38 | |

Table 8. Results of the analysis of variance for Question 4.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 47.643 | 27 | | | |
| ATTRAC | 28.107 | 2 | 14.054 | 20.577 | <.001 |
| ERROR | 36.893 | 54 | .683 | | |
| SEX | .595 | 1 | .595 | .677 | |
| ERROR | 23.738 | 27 | .879 | | |
| ATTRAC SEX | 1.155 | 2 | .577 | .483 | |
| ERROR | 64.512 | 54 | 1.195 | | |
| TOTAL | 202.643 | 167 | | | |
| (RESIDUAL) | 125.143 | 135 | | | |

Table 9. Group means and standard deviations for Question 5.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>3.79<br>1.10<br>32.71 | 28<br>3.68<br>.90<br>22.11 | 3.73 |
| AVE | 28<br>3.57<br>1.29<br>44.86 | 28<br>3.39<br>1.20<br>38.68 | 3.48 |
| UNA | 28<br>3.29<br>1.18<br>37.71 | 28<br>3.36<br>1.22<br>40.43 | 3.32 |
| | 3.55 | 3.48 | |

Table 10. Results of the analysis of variance for Question 5.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 59.310 | 27 | | | |
| ATTRAC | 4.798 | 2 | 2.399 | 2.404 | .098 |
| ERROR | 53.869 | 54 | .998 | | |
| SEX | .214 | 1 | .214 | .162 | |
| ERROR | 35.786 | 27 | 1.325 | | |
| ATTRAC SEX | .464 | 2 | .232 | .185 | |
| ERROR | 67.536 | 54 | 1.251 | | |
| TOTAL | 221.976 | 167 | | | |
| (RESIDUAL) | 157.190 | 135 | | | |

Table 11. Group means and standard deviations for Question 6.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>3.43<br>1.32<br>46.86 | 28<br>3.61<br>1.07<br>30.68 | 3.52 |
| AVE | 28<br>2.68<br>1.25<br>42.11 | 28<br>3.50<br>1.45<br>57.00 | 3.09 |
| UNA | 28<br>3.32<br>1.06<br>30.11 | 28<br>2.75<br>1.21<br>39.25 | 3.04 |
| | 3.14 | 3.29 | |

Table 12. Results of the analysis of variance for Question 6.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 86.952 | 27 | | | |
| ATTRAC | 7.821 | 2 | 3.911 | 3.326 | .042 |
| ERROR | 63.512 | 54 | 1.176 | | |
| SEX | .857 | 1 | .857 | .743 | |
| ERROR | 31.143 | 27 | 1.153 | | |
| ATTRAC SEX | 13.607 | 2 | 6.804 | 5.708 | .005 |
| ERROR | 64.393 | 54 | 1.192 | | |
| TOTAL | 268.286 | 167 | | | |
| (RESIDUAL) | 159.048 | 135 | | | |

Table 13. Group means and standard deviations for Question 7.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>3.71<br>1.27<br>43.71 | 28<br>3.36<br>1.25<br>42.43 | 3.54 |
| AVE | 28<br>3.00<br>1.19<br>38.00 | 28<br>3.89<br>1.17<br>36.68 | 3.45 |
| UNA | 28<br>3.25<br>1.46<br>57.25 | 28<br>2.71<br>1.46<br>57.71 | 2.98 |
| | 3.32 | 3.32 | |

Table 14. Results of the analysis of variance for Question 7.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 41.976 | 27 | | | |
| ATTRAC | 9.893 | 2 | 4.946 | 2.676 | .076 |
| ERROR | 99.774 | 54 | 1.848 | | |
| SEX | .000 | 1 | .000 | | |
| ERROR | 31.333 | 27 | 1.160 | | |
| ATTRAC SEX | 16.964 | 2 | 8.482 | 4.460 | .015 |
| ERROR | 102.702 | 54 | 1.902 | | |
| TOTAL | 302.643 | 167 | | | |
| (RESIDUAL) | 233.810 | 135 | | | |

Table 15. Group means and standard deviations for Question 8.

| | M | F | |
|---|---|---|---|
| ATT | 28<br>3.29<br>1.18<br>37.71 | 28<br>3.61<br>1.26<br>42.68 | 3.45 |
| AVE | 28<br>3.39<br>1.07<br>30.68 | 28<br>3.07<br>1.25<br>41.86 | 3.23 |
| UNA | 28<br>3.18<br>1.22<br>40.11 | 28<br>3.21<br>1.34<br>48.71 | 3.20 |
| | 3.29 | 3.30 | |

Table 16. Results of the analysis of variance for Question 8.

| SOURCE | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| BLOCKS/SUBJECTS | 65.875 | 27 | | | |
| ATTRAC | 2.048 | 2 | 1.024 | 1.145 | .326 |
| ERROR | 48.286 | 54 | .894 | | |
| SEX | .006 | 1 | .006 | .005 | |
| ERROR | 30.827 | 27 | 1.142 | | |
| ATTRAC SEX | 2.905 | 2 | 1.452 | .810 | |
| ERROR | 96.762 | 54 | 1.792 | | |
| TOTAL | 246.708 | 167 | | | |
| (RESIDUAL) | 175.875 | 135 | | | |